

<b>Name:</b>	
<b>Enrolment No:</b>	

## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, September/ October 2018**

<b>Programme Name:</b> M.Tech (PLE)	<b>Semester</b> : III
<b>Course Name</b> : Equipment & machinery Maintenance	<b>Time</b> : 03 hrs
<b>Course Code</b> : MECH 7003	<b>Max. Marks</b> : 100
<b>Nos. of page(s)</b> :	
<b>Instructions:</b>	

### SECTION A

S. No.	Question	Marks	CO
Q 1	Describe various types of faults in three phase electrical system and explain with schematic diagram.	4	CO4
Q 2	Indicate functioning of charge air and lube oil system in turbo-charged marine diesel engines. Mention various protective alarms provided in above circuits as alarm and protect it from seizure.	4	CO1
Q 3	What are the pre requisite for selection of location for SPM system?	4	CO6
Q 4	Explain steps required for improving energy efficiency in all compressors.	4	CO1
Q 5	Elaborate major causes of failures and types of faults observed that occur in electronic instruments & telecom system	4	CO3

### SECTION B

Q 6	Write down the chemistry of fire and theory for extinguishing of petroleum fire. Elaborate on methods used for extinguishing petroleum fire. Explain terms BLEVE and boil over occurring during tank fire. What are the goals of loss control management?	10	CO5
Q 7	Rim seal fire on large crude oil storage tank is observed. How will you control it? State actions to be taken so that fire does not spread on other tanks. Describe the method to confirming the soundness of weld carried out on sketch plate and annular plate welding.	10	CO2
Q 8	Elaborate various types of instruments used for enhancing the safety of equipment's. Why ESD system is provided in logic?	10	CO3

